General Information

For

A.I.T. Industries

Hand Edgers

Manufactured By:

A.I.T. Industries

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20826

Forward

Your AIT Hand Edger has been engineered and produced to give you satisfactory service with minimum maintenance. The following information has been prepared to assist you in the operation and service of your machine.

WARNING

This machine, as with all machinery having moving parts and/or electrical components, should be operated and serviced with care.

- Do not plug or unplug power cord with power switch in the "ON" position.
- Always follow safety precautions when operating or servicing this machine.
- Wear safety glasses when operating this machine.
- If a submersible coolant pump is being used with the machine, unplug pump from its power receptacle before installing or removing it from the coolant tank. Never place hand into coolant tank while coolant pump is plugged into a power receptacle.

"All Design and engineering details are subject to changes."

Safety Summary

- For your own safety, read the instruction manual before operating edger.
- Wear eye protection.
- DO NOT wear necktie or loose clothing.
- Keep hands away from moving parts.
- Shut off power and wait for grinding wheel to stop before servicing equipment.
- Keep area clean. Cluttered areas and benches invite accidents.
- Keep children away. All visitors should be kept a safe distance from work area.
- Wear protective hair covering to contain long hair.
- Maintain edger with care. Follow instructions for changing diamond wheels and replacement parts.
- Disconnect edger before servicing.
- Reduce risk of unintentional starting. Make sure power switch is in "off" position before plugging in.
- Use recommended accessories and replacement parts. The use of improper accessories or substitute parts may cause risk of injury to persons.
- Check for damaged parts before further use of equipment. Any part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function.
- **Never** leave equipment running unattended. Turn power off.
- Stay alert. Watch what you are doing. Use common sense. Do not operate equipment when you are tired.

SECTION I
General Information for AIT Hand Edger

1-1. POWER CORD COLOR CODING

120 Vac. Machines: (In accordance with USA National Electric Code)

Line.....Black
Neutral .....White
Safety Earth.....Green

240 Vac. Machines:

	USA	Export*
Line L1	Black	Brown
Line L2	White	Blue
Safety Earth	Green	Yellow/Green

** Input line colors for 240 Vac export Hand Edgers are dependent on type of power cord supplied with machine.

WARNING

Your AIT Hand Edger is equipped with a three-prong AC cord. Grounding is necessary for operator protection and to help prevent damage due to an electrical short in machine. For operator safety, it is imperative that a three-prong AC outlet be used to power machine.

CAUTION

For optimum performance from your Hand Edger, an input line voltage of at least 110 Vac for 120 Vac models or 216 Vac for 240 Vac models should be available at AC outlet for machine. A lesser line voltage could cause drive motor to overheat. Avoid using extension cords, as they can cause power loss to the machine and are a common cause of low-voltage conditions.

1-2. MAINTENANCE OF DIAMOND WHEELS

CAUTION

The following instructions apply only to bonded diamond wheels; do not attempt to stone a plated diamond wheel. Stoning of a plated diamond wheel will cause the diamonds to wear flat or to round prematurely.

1-3. STONING BONDED DIAMOND WHEELS. The fewer times that a bonded finishing diamond wheel is stoned, the longer it will last. It is recommended that a bonded finishing wheel be stoned only when it appears that it is slowing down in its grinding ability. When it becomes necessary to stone a bonded finishing wheel, place Hand Edger power switch in ON position. With in-house, recirculating coolant pump, or bottle feed coolant flow present, place a coolant soaked gray dressing stick (AIT #532) lightly against the rotating diamond wheel. Using light pressure, work the gray dressing stick back and forth across the complete working surface of the diamond wheel. When the diamond wheel removes stock from the dressing stick, dull diamonds have been pulled from the bond, and/or bonding material has been removed to expose new diamonds. A properly stoned diamond wheel will take on a uniformly dull matte finish without any shiny spots. The gray dressing stick should always be thoroughly soaked in coolant solution or tap water before dressing operations.

1-4. CLEANING PLATED DIAMOND WHEELS. If a plated diamond wheel appears to be slowing down in its grinding ability, there is the possibility that lens residue has built up between diamonds or has completely covered some or all diamonds. If this is the case, use a stiff bristle brush and AJAX/s or equivalent cleanser to clean the plated diamond wheel. Do not allow the cleanser to contaminate the coolant solution. As previously mentioned, never stone a plated diamond wheel, as stoning will cause the diamonds to wear flat or to round prematurely.

1-5. DIAMOND WHEEL REPLACEMENT. To replace a diamond wheel, perform following steps:

1. Place Hand Edger power switch in OFF position. Remove all power from machine by removing power cord plug from AC wall outlet. Remove any shields to gain access to diamond wheel retaining screw.

NOTE

The diamond wheel retaining screw is loosened and removed by turning screw in the same direction as normal diamond wheel rotation. If replacement diamond wheel has an arrow stamped at side of hub, ensure that wheel is installed with arrow pointing in direction of normal wheel rotation.

2. Using appropriate wrench, remove diamond wheel retaining screw. If required, use mallet to rap wrench to loosen screw. Remove wheel washer and diamond wheel.
3. Carefully clean parts that are to be reused.
4. To prevent rust, apply a thin coating of non-sulfur grease or petroleum jelly to hub and sides of replacement diamond wheel and wheel washer.
5. Install replacement diamond wheel on drive motor shaft. Use diamond wheel retaining screw and wheel washer to secure diamond wheel in place.

6. Insert machine power cord plug into AC wall outlet. Place Hand Edger power switch in ON position; after motor has reached operational apeed, place power switch in OFF position. While wheel is coasting, check for wobble or bounce. Should any abnormality be observed, remove power from machine; loosen diamond wheel 30°. Thighten retaining screw and retest for wobble or bounce. Repeat this step as necessary until smoothest rotation is observed. Reinstall any shields previously removed.

1-6. CLEANING AND LUBRICATION The 307, 323, and 324 Hand Edgers should be cleaned and lubricated at least weekly. If glass sludge is allowed to accumulate in wheel housing, opening of wheel housing later for wheel replacement could become extremely difficult. Observe that there is a grease fitting at the hinge of the wheel housing. It is recommended that the hinge be greased weekly and the wheel housing opened and closed until free operation is observed.

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SECTION II
PARTS LIST

2-1. GENERAL. The parts listed in the following computer generated parts list are indented to show relationship. A level -2 listed part is part of the -1 level item listed above it. Indented items may be ordered separately or as part of the next higher assembly (assembly of which item is a part of). When ordering parts, please list part number, description, and quantity desired.

Level	Part No.	Description	UM	Qty.
1	12380	Wheel Housing	EA	1.0
1	10437	Wiper Plate	EA	1.0
1	10436	Coolant Tube	EA	1.0
1	10439	Shims 5/8 x 1 x .062	EA	3.0
1	20145	Pipe Coupling	EA	1.0
1	20146	Elbow, 90 Deg 1/4 x 1/8 Pipe	EA	1.0
1	20147	Shut Off Valve	EA	1.0
1	20630	Vinyl Cabinet Bumper Black	EA	1.0
1	10435	Flange Spacer	EA	1.0
1	10438	Wiper, Wheel, Leather 307-323-324	EA	1.0
2	20854	Belting, Leather 1/8" Thk x 1-1/8" Wide	FT	0.5
1	12315	Hande 307 E.D. Plate CC (Gray)	EA	1.0
1	12294	Warning Elect Shock Plate CC (New Style)	EA	1.0
1	12287	Hande 307 Designation Plate CC (Gray)	EA	1.0
1	30081	H.E. Motor, 120 V 60 HZ 307 (Gray)	EA	1.0
1	10630	Drain Hose 3 Ft. Length	EA	1.0
1	20826	Maintenance Manual 307-323-324	EA	1.0
1	20055	Hose Clamp	EA	1.0